

2. The total mortality of cattle in the State during the half-year shows an increase of 9.9 per cent compared to the corresponding period of the previous year, while mortality under contagious diseases alone shows an increase of 4.5 per cent. Mortality under Rinderpest was the lowest ever recorded being 7.6 per cent of the total mortality under contagious diseases. Mortality under foot and mouth also is the lowest observed for some years. The mortality under Hæmorrhagic Septicæmia, Anthrax and Blackquarter formed 56.7 per cent of the total mortality under contagious diseases during the period under review.

*Cattle Mortality Returns.* The Revenue Commissioner's attention is invited to the remarks of the Superintendent, Civil Veterinary Department, in the matter of the collection of the returns, and he is requested to take suitable action to enforce the preparation and submission of correct returns in future.

S/ ABDUL WAJID,

Secretary to Government,  
Development Department.

#### ANNEXURE.

LETTER No. C. S. 301-627 OF 1932-33, DATED THE 1ST APRIL 1933, FROM THE SUPERINTENDENT, CIVIL VETERINARY DEPARTMENT, BANGALORE, TO THE DIRECTOR OF AGRICULTURE IN MYSORE, BANGALORE.

I have the honor to forward herewith the return of Cattle Mortality in the State, for the half-year ending 31st December 1932, together with the statement of C. M. returns received from Patels for the same period and to state:

1. The total mortality in the State during the half-year from all causes—both contagious and non-contagious—shows an increase of 3,331 or 9.9 per cent over that of same period during the previous year.

2. That the mortality due to contagious diseases alone shows an increase of 342 or 4.5 per cent over that of the same period for the previous year.

3. Mortality under Rinderpest, the most serious disease of Live-stock in the State, is the lowest ever recorded, being only 606 or 7.6 per cent of the total mortality under contagious diseases.

During the period under review, the incidence of Rinderpest was very low mainly owing to prompt control measures being adopted to stamp out the few infected centres before the commencement of Cattle Fairs when a large scale movement of cattle takes place usually leading to rapid spread of the disease.

During the half-year, excepting in two instances in Shimoga District, action under Regulation II of 1927, was not found necessary as raiyats readily submitted their cattle for inoculation.

Seven thousand, five hundred and twenty-five S. S. inoculations were performed during the period under review.

4. Although the total mortality under Blackquarter, Anthrax and Hæmorrhagic Septicæmia shows a decrease of 3.9 per cent over to that of the previous year, they still formed 56.7 per cent of the total mortality under contagious diseases during the half-year. Mortality under Blackquarter and Anthrax is specially noticeable.

Blackquarter filtrate, bacterin and serum as well as H. S. serum and vaccine prepared by the Mysore Serum Institute have been exclusively used when dealing with outbreaks of these diseases.

Sixty-three thousand, eight hundred and fifty-eight inoculations were performed during the half-year ending December 1932 in all.

5. Mortality under Foot and Mouth is the lowest observed for some years.

6. The mortality under Parasitic Diseases is shown as 810 only, but this appears to represent deaths from parasitic infestation only among cattle, as during personal investigation by the officers of the Department, it was observed that a very large mortality had occurred among sheep and goats due to worm parasites. It is evident, therefore, that



mortality among sheep and goats does not receive the same degree of attention from Patels as that of cattle. It will be necessary in the interests of Live-stock improvement, to emphasise the need for reporting and recording mortality among these animals also by Patels in future.

7. The receipt of C. M. returns from Patels in Taluk Offices appears to have slightly improved, but still remains unsatisfactory in many of the taluks, in spite of Government Orders and Revenue Commissioner's Circulars.

During the period under review, the percentage of C. M. returns received in the Taluk Offices of Bangalore, Hassan, Arkalgud and Saklespur, is unsatisfactory and no endeavour seems to have been made to collect even 50 per cent of the returns.

### REVIEW OF THE CATTLE MORTALITY RETURNS FOR THE HALF-YEAR ENDING 31st DECEMBER 1932.

The total reported mortality among Live-stock in the State during the half-year ending 31st December 1932, was 36,846 as compared with 33,515 for the last half of the previous year. The increase of 3,331 or 9.9 per cent is almost entirely accounted for by an increase in reported deaths from non-contagious causes, the increase under this head being 2,979. The increase under contagious diseases over the figures of the last half of 1931 was 342 or about 4.5 per cent.

As pointed out by the Superintendent, the deaths under Rinderpest (606) are the lowest on record for any similar period. This disease which is looked upon throughout India as the most serious disease of Agricultural Live-stock, has for the time being, at least ceased to be of any significant importance in Mysore. While this may be due partly to a natural fall following the very severe outbreaks of 1927, 1928 and 1929, a common phenomenon in the case of contagious diseases, I think there can be no doubt that it is largely due to the very efficient inoculation campaign of the serum simultaneous method which has now continued for a period of five years.

The four diseases which were responsible for the increase under deaths from contagious causes are Anthrax, Blackquarter, Foot and Mouth and Parasitic Diarrhoea. To these must be added an increase under other deaths from "Other contagious diseases." As regards the three diseases mentioned above, the first two, Anthrax and Blackquarter, are much the most serious and luckily we have now sera and vaccines for their control. Foot and Mouth is a much less serious cause of mortality and there is as yet no satisfactory method for its control. The same remarks apply to Parasitic Diarrhoea.

As regards other contagious diseases, these represent diseases the cause of which is obscure. Most of the deaths under this head occur among sheep and are apparently the result of attack by parasitic worms. Sheep diseases have as yet been very imperfectly investigated in India and there is a very large field for work in this State along this line. With the one officer employed on disease investigation, progress must of necessity be slow.

As will be noted, deaths from contagious diseases were less than a third of those from natural causes, a condition which I think must be considered as very satisfactory. It is also satisfactory to note that practically no coercive measures have had to be taken in connection with inoculation work.

L. C. COLEMAN,  
*Director of Agriculture.*





Return of Cattle Mortality in the Mysore State for the half-year ending with 31st December 1932—*concd.*

District	Description of animal	Contagious diseases								Non-contagious causes						Total							
		Rinderpest	Hæmorrhagic Septicæmia	Anthrax	Blackquarter	Foot and mouth	Sour	Red water	Parasitic diarrhoea	Other contagious diseases	Total	Snake-bite	Wild animals	Criminal poisoning	Natural decay and accidents	Other causes	Total	Cattle	Buffaloes	Ponies	Sheep and goats	Asses	
KADUR For the half-year ending 31st December 1931.	Cattle	31	59	12	9	6	...	...	19	26	164	15	706	...	1,247	375	2,843	2,507	...	...	...	...	...
	Buffaloes	16	24	1	5	2	...	...	20	18	86	1	93	1	303	125	523	2,441	609	...	...	...	...
	Ponies	...	...	...	...	...	...	...	...	1	1	...	2	...	1	1	4	...	...	5	...	...	...
	Sheep and goats...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	...	...	...	3	...	...
	Asses	...	...	...	...	...	...	...	...	...	...	...	3	...	4	1	8	...	...	...	...	...	...
HASSAN For the half-year ending 31st December 1931.	Cattle	9	29	18	175	54	...	1	84	25	295	5	244	...	1,565	574	2,838	2,683	...	...	...	...	...
	Buffaloes	6	31	2	8	14	...	...	74	7	132	2	28	...	229	40	409	2,103	541	...	...	...	...
	Ponies	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	2	...	502	...	...	...	...
	Sheep and goats...	...	...	...	...	84	...	...	1	93	184	...	26	...	31	43	100	...	...	...	8	...	...
	Asses	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...
CHITALDRUG For the half-year ending 31st December 1931.	Cattle	22	69	103	357	1	...	...	6	69	616	42	161	4	1,607	443	2,256	2,372	1,551	...	...	...	...
	Buffaloes	31	144	69	78	4	...	...	17	139	502	16	40	4	717	232	1,059	2,200	1,220	...	...	...	...
	Ponies	...	...	...	...	...	...	...	...	1	1	...	1	...	4	2	7	...	...	...	...	...	...
	Sheep and goats...	8	28	...	...	138	...	...	...	129	298	1	49	...	177	1,862	2,089	...	...	...	2,887	...	...
	Asses	...	...	...	...	...	...	...	...	...	...	...	...	1	3	4	8	...	...	...	2,691	...	...
Total for the half-year ending 31st December 1932.		376	297	380	1,956	264	...	8	463	424	4,763	193	8,656	90	12,463	8,845	30,188	24,951	...	...	...	...	...
		197	304	221	216	752	...	1	272	266	1,529	74	644	112	2,932	1,298	4,960	...	6,499	...	...	...	...
		...	...	1	...	...	...	...	2	7	10	...	17	...	20	13	50	...	...	60	...	...	...
		33	53	431	53	277	...	...	88	715	1,620	19	332	5	832	2,461	3,689	...	...	...	5,899	...	...
		...	...	...	...	...	...	...	...	...	...	...	6	...	23	9	37	...	...	...	...	...	...
Grand Total		606	629	1,633	2,935	598	...	4	820	1,412	7,922	236	4,645	47	16,319	7,027	28,924	24,951	56,845	...	...	...	...
Total for the half-year ending 31st December 1931.		610	731	1,587	2,364	209	...	11	637	1,371	7,570	266	4,763	24	14,872	6,030	25,945	...	83,515	...	...	...	...



## Statement showing the receipt of Cattle Mortality Returns in the Mysore State for the half-year ending 31st December 1932.

District	Taluk	No. of charak villages	Percentage of returns received during						Average percentage during the half-year ending 31st Dec. 1932.	Average percentage during the half-year ending with 30th June 1932.
			July 1932	Aug. 1932	Sept. 1932	Oct. 1932	Nov. 1932	Dec. 1932		
Bangalore	Bangalore	381	42	49	54	55	49	52	50	48
	Anekal	181	88	87	91	92	90	89	89	89
	Hoskote	314	57	23	48	60	63	67	48	66
	Nelamangala	286	55	51	64	70	71	63	61	66
	Dodballapur	272	82	77	76	76	75	68	75	79
	Devanahalli	242	61	63	62	61	68	64	62	59
	Kankanhalli	231	87	84	88	73	50	76	76	88
	Magadi	303	60	58	69	57	58	65	60	69
	Channarayana	142	89	84	87	82	86	88	86	88
	Closepet	135	77	68	75	70	74	76	73	73
Kolar	Kolar	295	64	65	68	66	68	75	66	60
	Mairur	297	64	67	68	68	71	68	67	65
	Mulbagal	308	74	54	65	63	48	61	60	63
	Bowringpet	359	61	57	60	63	68	60	60	58
	Chikballapur	212	72	73	63	79	81	72	74	71
	Bagepalli	203	79	85	80	78	80	81	80	75
	Gudibanda	96	93	95	94	94	91	93	93	94
	Chintamani	334	79	79	80	78	75	81	79	78
	Sidlaghatta	238	60	62	63	63	62	64	62	60
	Goribidnur	209	86	68	86	86	88	90	87	87
	Srinivasapur	227	81	82	79	82	77	80	80	84
Mysore	Mysore	131	76	70	74	79	68	64	72	72
	Heggaddevankote	167	68	67	74	78	82	79	74	59
	Mandya	171	59	62	72	81	60	67	67	65
	Maddur	153	63	69	61	60	65	70	65	65
	Malavalli	176	65	74	76	78	76	79	74	68
	T. Narasipur	124	65	65	66	68	68	71	67	67
	Soringapatam	180	59	66	56	62	65	70	63	55
	Nagamangala	340	70	69	83	75	72	70	73	72
	Krishnarajpete	335	74	71	80	78	73	81	77	71
	Channarayana	148	88	83	80	78	81	74	80	80
	Nanjangud	170	51	54	57	54	68	63	58	52
	Yelandur	94	100	91	91	100	100	100	97	97
	Gundlupet	126	63	71	74	66	81	81	72	77
	Yedatore	150	66	68	66	69	65	66	67	65
	Hunsur	170	75	78	79	79	76	77	77	78
	Periyapatna	135	70	64	67	66	61	61	65	57
Hassan	Hassan	357	89	40	52	51	53	59	48	49
	Arkalgud	256	42	48	45	57	44	51	48	42
	Channarayana	368	72	65	74	74	78	73	72	68
	Saklespur	270	53	49	40	61	59	36	49	49
	Alur	163	76	79	79	72	74	68	74	74
	Belur	355	71	63	64	67	70	83	70	49
	Hole-Narasipur	200	47	37	48	56	55	64	51	53
	Arasikere	321	69	67	69	53	69	64	65	71
Tumkur	Tumkur	310	61	61	61	52	57	59	60	62
	Madhugiri	271	74	69	79	83	77	79	77	77
	Sira	220	71	60	64	61	70	71	68	66
	Gubbi	361	62	80	79	78	81	82	80	79
	Kunigal	288	77	70	75	76	75	75	75	66
	Pavagada	135	90	90	87	91	88	87	89	84
	Tiptur	227	88	75	78	82	80	79	80	79
	Chiknayakanhalli	202	84	82	86	83	77	88	88	94
	Thuruvekere Sub-Taluk	142	75	74	79	76	71	69	74	77
	Kortagere	203	59	56	61	61	64	61	60	58
Chitaldrug	Chitaldrug	165	58	50	50	52	72	58	57	51
	Jagalur	134	77	80	78	84	82	82	80	83
	Hiriyur	132	80	61	96	88	96	100	87	75
	Davangere	176	67	69	75	77	74	68	72	63
	Harihara Sub-Taluk	76	93	96	96	81	100	97	94	92
	Hosdurga	183	53	59	59	66	62	54	57	53
	Challakere	151	74	68	72	76	69	60	70	70
	Holalkere	157	48	78	70	70	72	73	68	67
	Molakalmuru	76	80	76	72	85	78	94	81	77
Shimoga	Shimoga	228	67	61	46	64	50	42	55	58
	Tirthahalli	216	73	86	87	91	84	86	84	79
	Sorab	264	92	85	87	82	73	89	84	85
	Sagar	261	70	60	87	78	70	81	74	70
	Hosanagar	206	87	84	81	84	83	84	84	84
	Channagiri	192	76	75	77	82	75	81	77	72
	Honnali	146	54	54	75	80	76	73	72	73
	Shikaripur	134	88	90	84	81	88	83	85	80
	Kumasi	66	90	93	90	84	84	93	89	88
Kadur	Kadur	237	68	63	63	60	64	63	62	69
	Chikmagalur	219	68	72	73	87	84	86	78	69
	Mudgere	188	91	94	96	88	93	68	91	86
	Tarikere	189	79	74	79	78	79	76	77	74
	Koppa	105	84	84	87	91	98	95	89	86
	Narasimharajapura	65	92	93	90	93	98	89	92	94
	Sringeri	25	100	100	100	100	96	100	99	100